

ABSTRACT OF THE DISCLOSURE

A signal switching device is disclosed that is capable of transmitting signals with less signal loss while securing a good isolation

5      characteristic. The signal switching device includes a first section formed from a superconducting material connected to a first transmission path. The first section has a smaller cross section at the input end than at the output end. Or, the signal

10     switching device may include a first section formed from a superconducting material connected to a first transmission path in series, and a second section formed from a superconducting material connected to a second transmission path in parallel. The cross

15     section of the second section is smaller than that of the second transmission path. The length of the second transmission path is determined in such a way that an input impedance of the second transmission path is sufficiently large when the second section

20     is in a superconducting state.